

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
PO041405	TWM001-VU	2	1	Net 30	M304P0.675W.091	304/316 Pipe .675 OD x .091 Wall Thickness : MATERIAL: TP304/TP316 STAINLESS STEEL SEAMLESS PIPE AS PER ASTM A312/ASME SA312 receive ft				24	11/9/2018	23		S126571	Stock	11/9/2018	\$ 5.00 / ft	0	\$115.84	TW Metals	
		3			M304TR0.500W.049	304 Round Tube .500 X .049W ; MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft				48		60		S126572	Stock	11/9/2018	\$ 3.44 / ft	0	\$206.31	TW Metals	
		4			M304TR0.750W.049	304 Round Tube .750 X .049W ; MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft				192		200		S126573	Stock	11/9/2018	\$ 2.58 / ft	0	\$515.80	TW Metals	
		5			M304TR0.875W.065	304 Round Tube .875 X .065W ; MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft				12		20		S126574	Stock	11/9/2018	\$ 4.20 / ft	0	\$84.00	TW Metals	
		6			M304TR1.250W.125	304 Round Tube 1.250 X .125W ; MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft				24		40		S126575	Stock	11/9/2018	\$ 6.15 / ft	0	\$246.00	TW Metals	

11

Plex 11/9/2018 5:48 PM *dart.Tollis.Andrew*



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO041405

Supplier: TWM001-VU
TW Metals
PO Box 933014
Altanta, GA 31193-3014 USA
Phone: 585 768 5600
Fax: 585 768 5601

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO041405
PO Date: 10/22/18
Due Date: 10/30/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Lavoie, Chantal
Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

E-MAILED
OCT 23 2018

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		M2024T3T1.000W.065		2024T3 Tubing 1" OD x 0.65" Thick : MATERIAL: 2024-T3 SEAMLESS ALUMINUM TUBING SPECIFICATION; WW-T-700/3, AMS 4088 OR AMS-WW-T-700/3 OR ASTM B210 receive ft	Firmed	-	10/30/18	312 ft	0 ft	312 ft	\$7.50/ft	\$2,340.00
Line Item Note: 26 pcs of 12 ft												
2		M304P0.675W.091		304/316 Pipe .675 OD x .091 Wall Thickness : MATERIAL: TP304/TP316 STAINLESS STEEL SEAMLESS PIPE AS PER ASTM A312/ASME SA312 receive ft	Firmed	-	10/30/18	24 ft	0 ft	24 ft	\$5.00/ft	\$120.00
3		M304TR0.500W.049		304 Round Tube .500 X .049W : MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft	Firmed	-	10/30/18	48 ft	0 ft	48 ft	\$3.4385/ft	\$165.05



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PURCHASE ORDER PO041405

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
4	✓ M	M304TR0.750W.049		304 Round Tube .750 X .049W : MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft	Firmed -		10/30/18	192 ft	✓ 204ft	A1 18/11/04	\$2.579/ft	\$495.17
5	✓ H	M304TR0.875W.065		304 Round Tube .875 X .065W : MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft	Firmed -		10/30/18	12 ft	✓ 20ft	A1 18/11/04	\$4.20/ft	\$50.40
6	✓ A1	M304TR1.250W.125		304 Round Tube 1.250 X .125W : MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft	Firmed -		10/30/18	24 ft	✓ 40ft	A1 18/11/04	\$6.15/ft	\$147.60
7	✓ A1	M6061T6T0.3125W.058		Aluminum Tube .3125 X .058W : MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 40 82 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft	Firmed -		10/30/18	100 ft	0 ft	100 ft	\$3.0789/ft	\$307.89
8	✓ A1	M6061T6T0.625W.125		6061-T6 Round Tube 0.625 X.125W : MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 40 82 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft	Firmed -		10/30/18	12 ft	✓ 22ft	A1 18/11/04	\$5.15/ft	\$61.80



Dart Aerospace Ltd.
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PURCHASE ORDER PO041405

Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
9		M6061T6T0.375W.035		6061-T6 Round Tube .375 X.035W : MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/8 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 40 82 OR AMS 4083 OR ASTM B210 OR ASTM B241 receive ft	Firmed	-	10/30/18	48 ft	✓ 48ft	A1 10/11/09	\$3.40/ft	\$163.20

Grand Total: \$3,851.11

Order Notes

- Procurement Quality Clauses
- A005 right of entry
- A012 chemical and physical test report
- A016 personnel qualification
- A017 raw material identification (as applicable)
- A026 certification of material conformance
- A041 quality management system
- A042 dart notification by supplier
- A043 retention of quality documents
- A048 counterfeit parts avoidance, detection, mitigation and disposition program
- A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 10/22/18 9:05 AM dart.lavoie.chantal



O'Neal High-Performance Metals Group

Packing
Slip

ORDER NO.: 80970737

FROM: CHIC

PAGE 1

ST NUMBER: 1203820

NET WGT:

151.292 REQ. DATE: 11/09/18 EARLY

LD TO:

SHIP TO:

RT AEROSPACE LTD
70 ABERDEEN ST
HAWKSBOURY ON
JADADART AEROSPACE LTD
1270 ABERDEEN ST
HAWKSBOURY ON
ONTARIO CANADA

CN K6A 1K7

CN K6A 1K7

LESPEPERSON:

MIKE ANDERSON

RMS:

NET 30 DAYS

D.B.:

SHIPPING POINT

ST ORD NO.:

PO041405

SHIP BY:

11/06/18

VIA:

COMMON CARRIER

FREIGHT:

PREPAID

RELEASE NO.:

RECEIVING PHONE:

JE ITEM DESCRIPTION

)1 43260 D2024-T3 1 OD X .065 WA

WIDTH

LENGTH
12 FT ML

J# ORD QTY

312.000 FT

INVOICE QTY

312.000 FT

SHIPPED QTY

312.000 FT

WT

71.436

PCS
26

RT#: M2024T3T1.000W.065

1 TEST REPORTS REQUIRED **

1 CERTS REQUIRED **

CN: EAR99

:49394608 HT:F002819470001 Export License: NLR

PC: 26

Expiration Date: 0/00/00

:UNITED STATES MFG:UNITED STATES

CUSTOMER QTY: 312.000 UOM FT
SLB/CL:227053

)2 38420 SMLS 304/L A-312 3/8 SCH 40

17/24 FT

J# ORD QTY

20.000 FT

INVOICE QTY

23.167 FT

SHIPPED QTY

23.167 FT

WT

13.271

PCS
1

RT#: M304P0.675W.091

1 TEST REPORTS REQUIRED **

1 CERTS REQUIRED **

CN: 2B999.g

:49383265 HT:11P046 Export License: NLR

PC: 1

Expiration Date: 0/00/00

PC: 1

CUSTOMER QTY:

23.167 UOM 1

SLB/CL:LWMK92

)3 37241 SMLS CD 304/L A269 1-1/4 X .120WA

20 FT

J# ORD QTY

40.000 FT

INVOICE QTY

40.000 FT

SHIPPED QTY

40.000 FT

WT

57.917

PCS
2

RT#: M304RT1.250W.125

1 TEST REPORTS REQUIRED **

1 CERTS REQUIRED **

CN: 2B999.g

Export License: NLR

Expiration Date: 0/00/00

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE
PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
REVIEW.



ORDER NO.: 80970737 FROM: CHIC PAGE 2

ST NUMBER: 1203820 NET WGT:
 LD TO:
 RT AEROSPACE LTD
 70 ABERDEEN ST
 HAWKSLEY ON
 JADA CN K6A 1K7

151.292 REQ. DATE: 11/09/18 EARLY
 SHIP TO:
 DART AEROSPACE LTD
 1270 ABERDEEN ST
 HAWKSLEY ON
 ONTARIO CANADA CN K6A 1K7

RESPONSER: MIKE ANDERSON
 RMS: NET 30 DAYS
 D.B.: SHIPPING POINT
 ST ORD NO.: PO041405

SHIP BY: 11/06/18
 VIA: COMMON CARRIER
 FREIGHT: PREPAID
 RELEASE NO.:

RECEIVING PHONE:

ITEM DESCRIPTION
 :49385117 HT:N180219AS15 At PC: 2
 F:CHINA MFG:CHINA

WIDTH LENGTH
 CUSTOMER QTY: 40.000 UOM FT
 SLB/CL:-

04 41723 D6061-T6 5/16 OD X .058 WA

J#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	108.000 FT	108.000 FT	108.000 FT	5.897	9

RT#: M6061T6T0.3125W.058

1 TEST REPORTS REQUIRED **
 1 CERTS REQUIRED **

CN: EAR99

:49380591 HT:2927553 At Export License: NLR PC: 9
 F:UNITED STATES MFG:UNITED STATES

Expiration Date: 0/00/00
 CUSTOMER QTY: 108.000 UOM FT
 SLB/CL:2927553

05 42588 D6061-T6 5/8 OD X .125 WA

J#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	12.000 FT	12.000 FT	12.000 FT	2.771	1

RT#: M6061T6T0.625W.125

1 TEST REPORTS REQUIRED **
 1 CERTS REQUIRED **

CN: EAR99

:49383418 HT:F002625360001 At Export License: NLR PC: 1
 F:UNITED STATES MFG:UNITED STATES

Expiration Date: 0/00/00
 CUSTOMER QTY: 12.000 UOM FT
 SLB/CL:225211

OKERS KUEHNE AND NAGEL LTD

TYPE OF PKG		PACK INFO				
		PKGS	GRS WEIGHT	WIDTH	LENGTH	HGHT
	REDDICRATE	1.000	121.000	8.0000	150.0000	8
					CUBIC FT	5.5556

HANK YOU FOR THIS ORDER

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O'Neal High-Performance Metals Group

Packing
Slip

ORDER NO.: 80970737 FROM: CHIC PAGE 3

ST NUMBER: 1203820

LD TO:

RT AEROSPACE LTD

70 ABERDEEN ST

HAWKSLEY ON

JADA

NET WGT:

151.292 REQ.DATE: 11/09/18 EARLY

SHIP TO:

DART AEROSPACE LTD

1270 ABERDEEN ST

HAWKSLEY ON

ONTARIO CANADA

CN K6A 1K7

CN K6A 1K7

LESPEPERSON:

MIKE ANDERSON

SHIP BY:

11/06/18

RMS:

NET 30 DAYS

VIA:

COMMON CARRIER

D.B.:

SHIPPING POINT

FREIGHT:

PREPAID

ST ORD NO.:

PO041405

RELEASE NO.:

RECEIVING PHONE:

ITEM DESCRIPTION

REDDICRATE

	WIDTH	LENGTH	
1.000	129.000	4.0000	284.0000 4
-----	-----	-----	CUBIC FT 2.6296

2.000 250.000

UNLOAD TYPE: NONE SPECIFIED

RR
000-

DATE SHIPPED _____

DATE FILLED

HANK YOU FOR THIS ORDER

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O'Neal High-Performance Metals Group



Packing
Slip

ORDER NO.: 80970737 FROM: CHIC PAGE 4

ST NUMBER: 1203820 NET WGT: 151.292 REQ. DATE: 11/09/18 EARLY
LD TO: SHIP TO:
RT AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKS BURY ON HAWKS BURY ON
JADA ONTARIO CANADA CN K6A 1K7
ESPERSON: MIKE ANDERSON SHIP BY: 11/06/18
RMS: NET 30 DAYS 235 TUBEWAY
D.B.: SHIPPING POINT CAROL STREAM IL 60188
ST ORD NO.: P0041405
A: COMMON CARRIER
EIGHT: PREPAID
LEASE NO.:
REIVING PHONE: CN K6A 1K7

✓ Metals MSDS data is available on our web site at www.twmetals.com. MSDS data can be found under the Technical Resources Tab, Product Statistics heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

"CERTIFICATE OF CONFORMANCE"

✓ Metals certifies that the material supplied on this purchase order and maintained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe and China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material.

Electronically Generated Document-Valid Without Signature Date: 11/06/18

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. Any version contrary to U.S. law prohibited.

HANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL REVIEW.

Packing
Slip

ORDER NO.: 60668340 FROM: CRAN PAGE 1
CUST NUMBER: 1203820 NET WGT: 100.851 REQ. DATE: 11/12/18 EARLY
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: MIKE ANDERSON
TERMS: NET 30 DAYS
F.O.B.: SHIPPING POINT
CUST ORD NO.: P0041405

LINE ITEM DESCRIPTION
0001 36506 SMLS CD 304/L A269 1/2 OD X .049 WA WIDTH LENGTH
20' ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	60.000 FT	60.000 FT	60.000 FT	14.155	3

PART#: M304TR0.500W.049
** 1 TEST REPORTS REQUIRED **
** 1 CERTS REQUIRED **
ECCN: 2B999.g Export License: NLR Expiration Date: 0/00/00
PO:49380769 HT:N171009AS12 PC: 3 CUSTOMER QTY:
MLT:CHINA MFG:CHINA SLB/CL:180419769-10 UOM

0002 36860 SMLS CD 304/L A269 3/4 OD X .049 WA 20' CL

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	200.000 FT	200.000 FT	200.000 FT	73.344	10

PART#: M304TR0.75W.049
** 1 TEST REPORTS REQUIRED **
** 1 CERTS REQUIRED **
ECCN: 2B999.g Export License: NLR Expiration Date: 0/00/00
PO:49385121 HT:N180118AS01 PC: 10 CUSTOMER QTY:
MLT:CHINA MFG:CHINA SLB/CL:18MTC-0725121-07 UOM

0003 36969 SMLS CD 304/L A269 7/8 OD X .065 WA 20' CL

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	20.000 FT	20.000 FT	20.000 FT	11.244	1

PART#: M304TR0.875W.065
** 1 TEST REPORTS REQUIRED **
** 1 CERTS REQUIRED **
ECCN: 2B999.g Export License: NLR Expiration Date: 0/00/00

1
THANK YOU FOR THIS ORDER

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<http://www.twmetals.com/invoice-terms.html>



Packing
Slip

O'Neal High-Performance Metals Group

ORDER NO.: 60668340 FROM: CRAN PAGE 2

CUST NUMBER: 1203820 NET WGT: 100.851 REQ. DATE: 11/12/18 EARLY
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: MIKE ANDERSON SHIP BY: 11/07/18
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: P0041405 RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION PC: 1 WIDTH LENGTH UOM
PO: 49377294 HT: YX1709608 CUSTOMER QTY: SLB/CL: 180127-10
MLT: CHINA MFG: CHINA

0004 41879 D6061-T6 3/8 OD X .035 WA 12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	48.000 FT	48.000 FT	48.000 FT	2.108	4

PART#: M6061T6T0.375W.035

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99

Export License: NLR

Expiration Date: 0/00/00

PO: 49392322 HT: F002772010001 PC: 4 CUSTOMER QTY: UOM
MLT: UNITED STATES MFG: UNITED STATES SLB/CL: 226651

BROKERS KUEHNE AND NAGEL LTD

AREA TYPE OF PKG
NEW PEN REDDICRATE
Orders In Package - 1

----- PACK INFO -----
PKGS GRS WEIGHT WIDTH LENGTH Hght
1.000 160.851 4.0000 246.0000 5
Box No - TWPK18044189 CUBIC FT 2.8472

1.000 160.851

UNLOAD TYPE: NONE SPECIFIED

BY: Tom Weaver
RT 000-

DATE SHIPPED _____

1
THANK YOU FOR THIS ORDER

DATE FILLED _____

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O'Neal High-Performance Metals Group



Packing
Slip

CUST NUMBER: 1203820 NET WGT:
SOLD TO:
DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON
CANADA

CN K6A 1K7

100.851 REQ. DATE: 11/12/18 EARLY
SHIP TO:
DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON
ONTARIO CANADA

CN K6A 1K7

SALESPERSON: MIKE ANDERSON
TERMS: NET 30 DAYS
F.O.B.: SHIPPING POINT
CUST ORD NO.: PO041405
VIA: COMMON CARRIER
FREIGHT: PREPAID
RELEASE NO.:
RECEIVING PHONE:

SHIP BY: 11/07/18
27 ENGLEHARD DRIVE
MONROE TWP NJ 08831

"TW Metals MSDS data is available on our web site at www.twmetals.com. MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

"CERTIFICATE OF CONFORMANCE"

"TW Metals certifies that the material supplied on this purchase order and contained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe and China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material."

Electronically Generated Certificate-Valid without signature Date: 11/07/18

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KAISER ALUMINUM
 FABRICATED PRODUCTS, LLC
 6573 W. WILLIS ROAD
 CHANDLER, AZ 85226

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:		
M49394608-1		43260		Drawn Seamless Tube/Pipe		
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:	KAISER LOT NUMBER:	ALLOY:	TEMPER:	
227053	001	09/28/2018	F00281947	2024	T3	
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	DIAM/DAF/THKNS:	WIDTH:	LENGTH:	
379.000 LB	138.000 PCS	231219			12.000 FT	
SHIP TO:	SOLD TO:					
TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA	TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA					

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00281947	0001	0001	71.4	50.0	24.5	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.50	0.50	4.90	0.90	1.80	0.10	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.00	0.00	3.80	0.30	1.20	0.00	0.00	0.00	NA	NA	NA	0.00	0.00
D32229	.13	.19	4.55	.77	1.36	.01	.14	.03	.00	.00	.01	.01	.02

Applicable Requirements:

Description: OD: 1.0000"; Wall: 0.0650"; Round @
 AMS4088K AMS-WW-T-700/3A ASTM B210-12
 This Product Complies to FAR BAA, DFARS BAA, FAR TAA
 COMPLIES TO DIN EN 10204 JAN 2005
 No Weld Repair. Mercury Free.



Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
 MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA (DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5 TRADE AGREEMENTS).

Plant Serial: 00029646
 Kaiser Order Number: 227053
 Line Item: 001

KAISER

ALUMINUM

FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentmidt, Quality Manager

TW METALS	
T	E
S	OCT 04 2018
T	CL
ACCEPTED BY	

Plant Serial: 00029646
Kaiser Order Number: 227053
Line Item: 001

KAISER

ALUMINUM

FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:			
M49392322-1		41879		Drawn Seamless Tube/Pipe			
KAISER ORDER NUMBER:	LINE ITEM:	SHIP DATE:	KAISER LOT NUMBER:	ALLOY:	TEMPER:		
226651	001	08/14/2018	F00277201	6061	T6		
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	DIAM/DAF/THKNS:	WIDTH:	LENGTH:		
249.000 LB	470.000 PCS	230672			12.000 FT		
SHIP TO:	SOLD TO:						
TW METALS INC 27 ENGLEHARD DRIVE EXIT 8A OFF NJ TPK MONROE TWP, NJ 08831 USA	TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA						

Actual Physical Properties

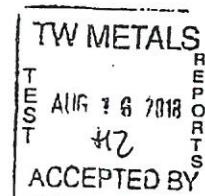
REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00277201	0001	0001	46.6	39.1	19.5	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot.
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D21756	.63	.30	.24	.04	.95	.10	.05	.03	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 0.3750"; Wall: 0.0350"; Round @
 AMS4082P AMS-WW-T-700/6C ASTM B210-12
 WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS4082P, WAS NOT OILED.
 This Product Complies to FAR BAA, DFARS BAA, FAR TAA
 COMPLIES TO DIN EN 10204 JAN 2005
 No Weld Repair. Mercury Free.



Miscellaneous Notes

MANUFACTURED IN USA. MELTED IN USA
 MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
 (DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
 TRADE AGREEMENTS).

Plant Serial: 00029189
 Kaiser Order Number: 226651
 Line Item: 001

KAISER

ALUMINUM

FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentidt, Quality Manager



PURCHASE MATERIAL: 8061-T61 62/T6510/T6511 SEAMLESS TUBING
SPECIFICATION: WWW-T-700VA


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MATERIAL TOLERANCE

A technical drawing of a flange. It features two concentric circles representing the outer and inner diameters. A vertical dimension line on the left indicates a thickness of 1.111. Another dimension line on the left shows the outer diameter as 0.000. A horizontal dimension line at the bottom shows the inner diameter as 0.000.

RELEASED
2013-07-02

1

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T670-375W.025
 DATE: 18/11/09

PO / BATCH NO.: P0041405/S126578

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 48ft
 QUANTITY INSPECTED: 48ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.375"
 THICKNESS RECEIVED: 0.375"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<u>Y</u> <u>(N)</u>	
CORRECT FINISH	<u>Y</u> <u>N</u>	
CORROSION	<u>Y</u> <u>(N)</u>	
CORRECT GRAIN DIRECTION	<u>Y</u> <u>N</u>	
CORRECT MATERIAL PER M-DRAWING	<u>Y</u> <u>N</u>	<u>AMS 4082</u>
CORRECT THICKNESS	<u>Y</u> <u>N</u>	
PHOTO REQUIRED	<u>Y</u> <u>(N)</u>	
CORRECT REF # TO LINK CERT	<u>Y</u> <u>N</u>	<u>F00277201 0001</u>
CORRECT MATERIAL IDENTIFICATION	<u>Y</u> <u>N</u>	
CORRECT M# ON THE MATERIAL	<u>Y</u> <u>N</u>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<u>Y</u> <u>(N)</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<u>Y</u> <u>(N)</u>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>A1</u>	SIGNED OFF BY: _____
DATE: <u>18/11/09</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

JIAXING MT STAINLESS STEEL CO.,LTD

Misco

MILL TEST CERTIFICATE

EN10204 3.1 CERTIFICATE

ISO 9001: 2015 TUV SUD CERT REGISTRATION NO.: 01 100 095954
PED/97/23/CE EURO CERT CERTIFICATE NO:CN.CE.1110S1-02/14



Precisely Right.

CERTIFICATE NO.: 18MTC-180419769-10

SALES CONTRACT NO.: M 49380769

COMMODITY: STAINLESS STEEL SEAMLESS TUBE

SPECIFICATION: ASTM A269-15a, ASTM A213-17, ASME SA213-17

PURCHASER: KASUGAI CO., LTD.

ORDER: M 49380769

DATE OF REPORT: 2018-4-19

Steel Grade	Heat No.	Dimensions			Quantity		Process	Delivery Condition	Macroscopic Inspection				
		O.D. (INCH)	W.T. (INCH)	Length (FT)	FT	Piece			End Cut	Appearance			
TP304/TP304L	N171009AS12	1/2	0.049	20	10460	523	Cold-Drawn	Pickled & 320 Grit polish	Passed	Passed			
Chemical Composition (W.T. %)													
Element	C	Si	Mn	P	S	Cr	Ni	Mo	Ti	-	-		
Requirements	≤0.035	≤1.00	≤2.00	≤0.045	≤0.030	18.0-20.0	8.0-11.0	-	-	-	-		
Ladle Analysis	0.014	0.38	1.34	0.031	0.001	18.21	8.04	-	-	-	-		
Mechanical Properties													
Test Item	Y.S. (MPa) Rp0.2	T.S. (MPa) Rm	EL. (%) In2in		Reduction of Area Z (%)	Hardnes s	Cold Bend Test	Flaring Test	Flattening Test	P.M.I. TEST			
Requirements	≥205	≥515	≥35		-	≤80	-	-	-	e=0.09			
Test Results	290	605	60		-	77	Passed	Passed	Passed	Passed			
Non Destructive Tests													
Test Item	Eddy Current Test			Remarks: - ASTM A269-15a, ASTM A213-17, ASME SA213-17 - TUBES TESTED PER ASTM A1016/1016M - SOLUTION HEAT TREATMENT: 1050°C X 1.5n/min - NO WELD REPAIR WAS PERFORMED. - PMI TESTING DONE ON EACH TUBE - SATISFACTOR - IN COMPLIANCE WITH NACE MR0175/ISO 15156-2015 - FREE FROM MERCURY CONTAMINATION - MATERIAL IS FREE FROM RADIOACTIVITY - VISUAL CHECK IS SATISFACTORY - COUNTRY OF ORIGIN: CHINA - COUNTRY OF MELT: CHINA									
Requirements	ASTM E 426												
Test Results	Passed												

1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT

2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.

Prepared by:

Approved by:



JUN 08 2018

Eric T.

ACCEPTED BY

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING
 SPECIFICATION: ASTM A213 OR ASME SA213 OR ASTM A289

WALL THICKNESS TOLERANCE PER ASTM A289 AS FOLLOWS:

OD (IN)	PERMISSIBLE OD TOL. (IN)	PERMISSIBLE WALL TOL.
UP TO $\frac{1}{2}$	± 0.005	$\pm 15\%$
$\frac{1}{2}$ TO $1\frac{1}{8}$, EXCL.	± 0.005	$\pm 10\%$
$1\frac{1}{8}$ TO $3\frac{1}{8}$, EXCL.	± 0.010	$\pm 10\%$
$3\frac{1}{8}$ TO $5\frac{1}{8}$, EXCL.	± 0.015	$\pm 10\%$
$5\frac{1}{8}$ TO 8, EXCL.	± 0.030	$\pm 10\%$

PART NUMBER:

M304TRD|DDDW|TTT
OD | WALL

WHERE "D,DDD" = OUTSIDE DIAMETER IN INCHES
 AND "TTT" = WALL THICKNESS IN INCHES
 EG. 0.375" OD X 0.065" WALL TUBING = M304TRD 375W 065

RELEASED
BB/26/13 NYD

B	REFORMAT DMC AND SPECS (ZN 00k 1), REF PART QB-0204	CP	08.10.20
A	NEW ISSUE	DS	01.08.08
REV	BY DATE		
DESIGN	DESCRIPTION		
DRAWN	<i>BB</i>	DART AEROSPACE LTD	
CHECKED		HAWTHORPE, ONTARIO, CANADA	
MFG. APPR		DRAWING NO	REV B
APPROVED		M304TR	SHEET 1 OF 1
DE APPR		TITLE	SCALE
DATE	08.10.20	304/316 ROUND TUBING	NTS

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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304TR0.500W.049
 DATE: 18/11/04

PO / BATCH NO.: P0041405/5126572

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 60ft
 QUANTITY INSPECTED: 60ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500"
 THICKNESS RECEIVED: 0.500"
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	ASTM A269
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Y	N	HT: N171009 AS12
CORRECT MATERIAL IDENTIFICATION	Y	N	
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/04</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



JIAXING MT STAINLESS STEEL CO.,LTD

MILL TEST CERTIFICATE

EN10204 3.1 CERTIFICATE

ISO 9001: 2015 TUV SUD CERT REGISTRATION No.: 01 100 095954
PED/97/23/CE EURO CERT CERTIFICATE NO:CN.CE.1110S1-02/14



Precisely Right.

CERTIFICATE NO.: 18MTC-0725121-07

SALES CONTRACT NO.: M 49385121

COMMODITY: STAINLESS STEEL SEAMLESS TUBE

SPECIFICATION: ASTM A269-15a, ASTM A213-17, ASME SA213-17

PURCHASER: KASUGAI CO., LTD.
ORDER: M 49385121
DATE OF REPORT: 2018-7-25

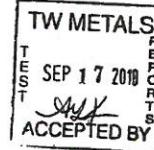
Steel Grade	Heat No.	Dimensions			Quantity		Process	Delivery Condition	Macroscopic Inspection	
		O.D. (INCH)	W.T. (INCH)	Length (FT)	FT	Piece			End Cut	Appearance
TP304/TP304L	N180118AS01	3/4	0.049	20	5200	260	Cold-Drawn	Pickled & 320 Grit polish	Passed	Passed
Chemical Composition (W.T. %)										
Element	C	Si	Mn	P	S	Cr	Ni	Mo	Ti	-
Requirements	≤0.035	≤1.00	≤2.00	≤0.045	≤0.030	18.0-20.0	8.0-11.0	-	-	-
Ladle Analysis	0.017	0.35	1.37	0.036	0.001	18.1	8.01	-	-	-

Mechanical Properties

Test Item	Y.S. (MPa) Rp0.2	T.S. (MPa) Rm	EL. (%) In2in	Reduction of Area Z (%)	Hardness H	Cold Bend Test	Flaring Test	Flattening Test	P.M.I. TEST
Requirements	≥205	≥515	≥35	-	≤80	-	-	-	-
Test Results	260	580	50	-	75	Passed	Passed	Passed	Passed

Non Destructive Tests

- Remarks:
- ASTM A269-15a, ASTM A213-17, ASME SA213-17
 - TUBES TESTED PER ASTM A1016
 - SOLUTION HEAT TREATMENT: 1050°C X 1.5m/min
 - NO WELD REPAIR WAS PERFORMED.
 - PMI TESTING DONE ON EACH TUBE - SATISFACTORY
 - IN COMPLIANCE WITH NACE MR0175/ISO 15156-2015
 - FREE FROM MERCURY CONTAMINATION
 - MATERIAL IS FREE FROM RADIOACTIVITY
 - VISUAL CHECK IS SATISFACTORY
 - COUNTRY OF ORIGIN: CHINA
 - COUNTRY OF MELT: CHINA



1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT
2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.

Prepared by:

Approved by:

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING
SPECIFICATION: ASTM A213 OR ASME SA213 OR ASTM A289

WALL THICKNESS TOLERANCE PER ASTM A289 AS FOLLOWS:

OD (IN)	PERMISSIBLE OD TOL. (IN)	PERMISSIBLE WALL TOL.
UP TO $\frac{1}{2}$	± 0.005	$\pm 15\%$
$\frac{1}{2}$ TO $1\frac{1}{4}$, EXCL.	± 0.005	$\pm 10\%$
$1\frac{1}{2}$ TO $3\frac{1}{4}$, EXCL.	± 0.010	$\pm 10\%$
$3\frac{1}{4}$ TO $5\frac{1}{2}$, EXCL.	± 0.015	$\pm 10\%$
$5\frac{1}{2}$ TO 6, EXCL.	± 0.030	$\pm 10\%$

PART NUMBER:

M304TR|OD|DDD|W|TTT|WALL|

WHERE "D.DDD" = OUTSIDE DIAMETER IN INCHES
AND "TTT" = WALL THICKNESS IN INCHES

EG. 0.375" OD X 0.065" WALL TUBING = M304TR0 375W 065

RELEASED
08/26/23 KJF

B	REFORMAT DWG. ADD SP/CS (ZN 108-1), REF PAR 08-020A	CP	08 10 20
A	NEW ISSUE	DS	01 08 08
REV	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	<i>[Signature]</i>	
DRAWN			
CHECKED			
MFG. APPR			
APPROVED	<i>[Signature]</i>	<i>[Signature]</i>	
DE APPR			
DATE	08.10.20		
		REV B	
		CRASHING NO	
		HAWKESBURY, ONTARIO, CANADA	
		DART AEROSPACE LTD	
		SHEET 1 OF 1	
		SCALE	
		NTS	
		Copyright © 2021 by DART Aerospace Ltd.	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304TR0.750W.049
 DATE: 18/11/09

PO / BATCH NO.: P0041405/5126573

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 202ft
 QUANTITY INSPECTED: 200ft
 QUANTITY REJECTED: 2ft

THICKNESS ORDERED: 0.750"
 THICKNESS RECEIVED: 0.750"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	ASTM A269
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Y	N	HT: N180118A501
CORRECT MATERIAL IDENTIFICATION	Y	N	
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY:	<u>A1</u>	SIGNED OFF BY: _____
DATE:	<u>18/11/09</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

MILL TEST REPORT

Purchaser.: TW METALS-Cranbury	Certificate No.: 2018-02-053								
Contract No.: TWM P.O.No.: M49377294	Date of Issue.: 2018.02.05								
Commodity: Stainless Steel Seamless Tubes	Specifications: ASTM A213-17/ASME SA213-15/ASTM A269-15a EAW								
Process: Cold Drawn	Delivery Condition: OD Polished to 240 Grit								
Steel Grade	Heat Number	Lot Number	Dimensions		Quantity				
					Pieces	Feet			
TP304/TP304L	YX1709-608	180127-10	7/8"x0.065"x20'		50	1,000			
Chemical Composition by Weight (%)									
Element	C	Mn	P	S	Si	Cr	Ni	Mo	Co
Requirements	≤0.035	≤2.00	≤0.045	≤0.030	≤1.00	18.00-20.00	8.00-11.00	-	-
Ladle Analysis	0.025	0.62	0.031	0.002	0.44	18.10	8.05	-	-
Product Analysis	0.026	0.65	0.032	0.002	0.43	18.12	8.10	-	-
Mechanical Properties									
Test Item	Elongation (% in 2")		Tensile Strength (PSI)			Yield Strength (PSI)			
			Rm	Rp / 0.2%	84,000/85,000	41,000/43,000	41,000/43,000		
Requirements	≥35		≥75,000			≥30,000			
Test Results	64/63		84,000/85,000			41,000/43,000			
Test Item	Reduction of Area Z (%)	Hardness	Cold Bend Test	Flaring Test	Flattening Test	Flange Test	P.M.I. Test		
							HRB≤80	-	22%
Requirements	-	72/74	-	Passed	Passed	-	OK		
Test Results	-	-	-	-	-	-	OK		
Test Item	Eddy Current Test	Air Underwater Pressure Test	Ultrasonic Test	Intergranular Corrosion Test		Macroscopic Inspection			
				ASTM E 426	-	-	ASTM A262 E	End Cut	Appearance
Requirements	ASTM E 426	-	-	-	OK	OK	OK		
Test Results	Passed	-	-	-	OK	OK	OK		

ISO 9001:2008 Certified by CAS 117 16 QU 0053-06 ROS

PED Certified by SZUTEST 2195-PED-1526002

Additional Remarks:

- (1) All tubes annealed to above 1900 Deg F and water quenched below 800 Deg F in 3 minutes
- (2) All tubes tested per ASTM A1016-17
- (3) Materials is NACE MR0103-2007 compliant (per Section 2.5)
- (4) Materials is NACE MR0175/ISO 15156-2003 compliant (per Section 4.2.1)
- (5) In Compliance with EN 10204-3.1
- (6) In Compliance with RoHS Stipulation
- (7) No weld repair performed
- (8) Free from mercury contamination
- (9) Free from radioactive contamination
- (10) Billets melt and pipes/tubes manufactured in China
- (11) All tubes 100% PMI tested
- (12) All tubes 100% Eddy Current tested

CANNOT CERTIFY COMPLIANCE
FAR BAA / DFARS BAA / FAR TAA

By:

James Shi

James Shi / Manager
Quality Control Department

We hereby certify that this report is true and correct.

Jiangsu Pufa Stainless Steel Tube Co., Ltd.
No. 99, Xuean Middle Road, Dongchen Town, Rugao City, Jiangsu Province, P.R.China



SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 1043/16 SS SEAMLESS ROUND TUBING
SPECIFICATION: ASTM A213 OR ASME SA213 OR ASTM A289

WALL THICKNESS TOLERANCE PER ASTM A269 AS FOLLOWS:

OD (IN)	PERMISSABLE OD TOL (IN)	PERMISSABLE WALL TOL (IN)
UP TO $\frac{1}{2}$	± 0.005	$\pm 15\%$
$\frac{1}{2}$ TO $1\frac{1}{2}$ EXCL.	± 0.005	$\pm 10\%$
$1\frac{1}{2}$ TO $3\frac{1}{2}$ EXCL.	± 0.010	$\pm 10\%$
$3\frac{1}{2}$ TO $5\frac{1}{2}$ EXCL.	± 0.015	$\pm 10\%$
5 $\frac{1}{2}$ TO 8. EXCL.	± 0.030	$\pm 10\%$

PART NUMBER:

M304TRD|DDD|W|TTT
OD | WALL

WHERE "D" = OUTSIDE DIAMETER IN INCHES
AND ".TTT" = WALL THICKNESS IN INCHES
E.G. 0.375" OD X 0.065" WALL TUBING = M304TRD 375W065

RELEASED
08/23/04

B	REFORMAT DWG ADD SPEC'S QN DB-1.	CP	08 10 20
A	REF PAR GR 020A	DS	01 06 08
REV	NEW ISSUE	BY	DATE
DESIGN	<i>JL</i>	DESCRIPTION	DART AEROSPACE LTD
DRAWN	<i>JL</i>	DRAWING NO	HAWKESBURY, ONTARIO, CANADA
CHECKED	<i>AS</i>	MFG. APPR	REV. B
APPROVED	<i>AS</i>	DE APPR	SCALE
DATE	08.10.20	DATE	08/23/04

NOTE: DRAWING NUMBER M304TR IS FOR INFORMATION ONLY. THE ACTUAL DRAWING NUMBER IS M304TRD.

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NTS

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304TR0.875W.065
 DATE: 18/11/09

PO / BATCH NO.: P0041405/S126574

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 20 ft
 QUANTITY INSPECTED: 20 ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.875"
 THICKNESS RECEIVED: 0.875"
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>N</u>	
CORRECT FINISH	<u>Y</u> N	
CORROSION	Y <u>N</u>	
CORRECT GRAIN DIRECTION	<u>Y</u> N	
CORRECT MATERIAL PER M-DRAWING	<u>Y</u> N	<u>ASTM A213</u>
CORRECT THICKNESS	<u>Y</u> N	
PHOTO REQUIRED	Y <u>N</u>	
CORRECT REF # TO LINK CERT	<u>Y</u> N	<u>HT: YX1709-608</u>
CORRECT MATERIAL IDENTIFICATION	<u>Y</u> N	
CORRECT M# ON THE MATERIAL	<u>Y</u> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AJ</u>	SIGNED OFF BY: _____
DATE: <u>18/11/09</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

WISCO

JIAXING MT STAINLESS STEEL CO.,LTD



MILL TEST CERTIFICATE

EN10204 3.1 CERTIFICATE

ISO 9001:2015 TUV SUD CERT REGISTRATION No.: 01 100 095954
PED/97/23/CE EURO CERT CERTIFICATE NO:CN.CE.1110S1-02/14

CERTIFICATE NO.: 18MTG-0518117-07

SALES CONTRACT NO.: M 49385117

COMMODITY: STAINLESS STEEL SEAMLESS TUBE
SPECIFICATION: ASTM A269-15a, ASTM A213-17, ASME SA213-17

Precisely Right.

TÜV Rheinland

Precisely Right.

PURCHASER: KASUGAI CO., LTD.
ORDER: M 49385117
DATE OF REPORT: 2018-5-18

Steel Grade	Heat No.	Dimensions			Chemical Composition (W.T. %)						Quantity	Delivery Condition	Macroscopic Inspection
		O.D. (INCH)	W.T. (INCH)	Length (FT)	FT	Piece	Process	Cold-Drawn	Pickled & 320 Grit polish	End Cut			
TP304/TP304L	N180219AS15	1-1/4	0.12	20	1700	85					Passed	Passed	Pass

Mechanical Properties

Test Item	Y.S. (MPa) Rp0.2	T.S. (MPa) Rm	EL. (%) In2in	Reduction of Area Z (%)	Hardness H	Cold Bend Test	Flaring Test	Flattening Test
Requirements	≥205	≥515	≥35	-	≤80	-	-	e=0.09
Test Results	275	605	59	-	75	Passed	Passed	Passed

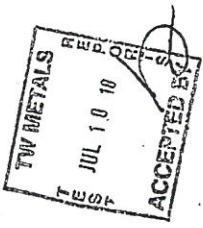
Non Destructive Tests

Test Item	Eddy Current Test	ASTM E 426	ASTM E 426
Requirements		Passed	Passed
Test Results			

- 1. WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND THE TEST RESULTS ARE IN COMPLIANCE WITH THE TERMS OF THE PURCHASE ORDER OR CONTRACT.
- 2. THE CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF THE COMPANY.

Approved by:

34hjz



SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING

SPECIFICATION: ASTM A213 OR ASME SA213 OR ASTM A289

WALL THICKNESS TOLERANCE PER ASTM A289 AS FOLLOWS:

OD (IN)	PERMISSIBLE OD TOL. (IN)	PERMISSIBLE WALL TOL.
UP TO $\frac{1}{2}$	± 0.005	$\pm 15\%$
$\frac{1}{2}$ TO $1\frac{1}{16}$ EXCL.	± 0.005	$\pm 10\%$
$1\frac{1}{2}$ TO $3\frac{1}{16}$ EXCL.	± 0.010	$\pm 10\%$
$3\frac{1}{2}$ TO $5\frac{1}{16}$ EXCL.	± 0.015	$\pm 10\%$
$5\frac{1}{2}$ TO 8 EXCL.	± 0.030	$\pm 10\%$

PART NUMBER:

M304TR|D DDD|W|TTT
OD | WALL

WHERE "D.DDD" = OUTSIDE DIAMETER IN INCHES
AND "TTT" = WALL THICKNESS IN INCHES

E.G. 0.375" OD X 0.065" WALL TUBING = M304TR0 375W 065

RELEASED
BB/26/23/HJ

B	REFORMAT DMC ADD SPECS (ZND84).	CP	08 10 20
A	NEW ISSUE	DS	01/08/08
REV		BY	DATE
DESIGN	<i>AB</i>	DART AEROSPACE LTD	
DRAWN	<i>AB</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO	REV B
MFG. APPR		M304TR	SHEET 1 OF 1
APPROVED	<i>AB</i>	DATE	SCALE
DE APPR	<i>AB</i>	08.10.20	NTS
DATE			Copyright 2008 by DART AEROSPACE LTD

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304TR1.25OW.125
 DATE: 18/11/12

PO / BATCH NO.: P0241405/S126575

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 40ft
 QUANTITY INSPECTED: 40ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.250"
 THICKNESS RECEIVED: 1.250"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>N</u>	
CORRECT FINISH	Y <u>N</u>	
CORROSION	Y <u>N</u>	
CORRECT GRAIN DIRECTION	Y <u>N</u>	
CORRECT MATERIAL PER M-DRAWING	Y <u>N</u>	ASTM A 269
CORRECT THICKNESS	Y <u>N</u>	
PHOTO REQUIRED	Y <u>N</u>	
CORRECT REF # TO LINK CERT	Y <u>N</u>	HT:N180219AS15
CORRECT MATERIAL IDENTIFICATION	Y <u>N</u>	
CORRECT M# ON THE MATERIAL	Y <u>N</u>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AJ</u>	SIGNED OFF BY: _____
DATE: <u>18/11/12</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: TR304TP316 STAINLESS STEEL SEAMLESS PIPE

SPECIFICATION:
 (ASTM A312) ASME SA312

PART NUMBER:
 M304P(D,DDD|W,TTT
 CD | WALL THICKNESS)

WHERE "D,DDD" = OUTSIDE DIAMETER IN INCHES PER NPS DESIGNATION (REF TABLE 1)
 AND "W,TTT" = WALL THICKNESS IN INCHES PER PIPE SCHEDULE (REF TABLE 1)

E.G. 3 $\frac{1}{8}$ SCHEDULE 40 PIPE = M304P0.675W.091

TABLE 1: DIMENSIONS OF NPS PIPE (REF ANSI B36.10/19)

NPS Designation	Outside Diameter (in)	Pipe Schedule	
		SCHEDULE 40	SCHEDULE 80
1 $\frac{1}{8}$	0.405	0.068	0.095
1 $\frac{1}{4}$	0.540	0.088	0.119
3 $\frac{1}{8}$	0.675	0.091	0.126
1 $\frac{1}{2}$	0.840	0.109	0.147
3 $\frac{1}{4}$	1.050	0.113	0.154
1	1.315	0.133	0.179
1 $\frac{1}{4}$	1.660	0.140	0.191
1 $\frac{1}{2}$	1.900	0.145	0.200
2	2.375	0.154	0.218
2 $\frac{1}{2}$	2.875	0.203	0.276
3	3.500	0.216	0.300
3 $\frac{1}{2}$	4.000	0.226	0.318
4	4.500	0.237	0.337

RELEASED

2017 JUN 19
 ECN 17-510 CP

REV.	A		NEW ISSUE		CP	17.02.24
	DESIGN	DRAWN	DESCRIPTION	BY		
CP	CP	CP	DART AEROSPACE LTD	DATE		
ML	CHECKED	HAWKESBURY, ONTARIO, CANADA				
DD	MFG. APPR.	DRAWING NO. M304P	REV. A			
WM	APPROVED	TITLE	SHEET 1 OF 1			
CP	DE APPR.	304/316 PIPE	SCALE			
CP	DATE	17.02.24	NTS			

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 8

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304 P0.67SW.091
 DATE: 18/11/12

PO / BATCH NO.: P0041405/SL26571

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 23.167 ft
 QUANTITY INSPECTED: 23.167 ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.675"
 THICKNESS RECEIVED: 0.675"
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	<i>ASTM A362</i>
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Y	N	<i>HT. 11P046</i>
CORRECT MATERIAL IDENTIFICATION	Y	N	
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/12</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



A COMPANY OF MUELLER INDUSTRIES

PRECISION TUBE CO.
287 WISSAHICKON AVE.
NORTH WALES PA 19454

Control No: 6257

CERTIFIED TEST REPORT

CUSTOMER PURCHASE ORDER NO.	CUST. ORD. NO.	PRECISION TUBE P/N							
M 49380591 LINE 001	475790	24A031250580005							
SOLD: TW METALS TO 175 TUBEWAY FOREST PARK, GA 30298 UNITED STATES		SHIP: TW METALS TO 175 TUBEWAY FOREST PARK, GA 30298 UNITED STATES							
QUANTITY ORD.	DESCRIPTION	QTY. SHIPPED	DATE SHIPPED						
3204 FT	METAL - 6061 ALUM TEMPER - T6 SPEC - AMS 4082P ASTM-B-210-12 AMS-WW-T-700/6C LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .3125 +.0030 -.0030 ID WALL .0580 +.0040 -.0040	3456 FT	12/13/17						
MECHANICAL PROPERTIES									
SAMPLE #	TENSILE STRENGTH (P.S.I.)	YIELD STRENGTH (P.S.I.)	ELONGATION IN 2 INCHES (%)	ROCKWELL HARDNESS	AVERAGE GRAIN SIZE (MM.)				
1	46,376	41,941	12						
2	45,712	40,899	15						
DESTRUCTIVE TESTS									
Comments: FAR BAA COMPLIES, DFARS BAA COMPLIES, FAR TAA COMPLIES									
NON-DESTRUCTIVE TESTS									
EDDY CURRENT: PASS									
CHEMICAL COMPOSITION									
ALLOY: 6061	HEAT:	TRACEABILITY #: 2927553	RAW MATL VENDOR: PTC13607 - KAISER ALUMINUM INVESTMENTS						
Min	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
	0.40		0.15		0.80	0.04			Rem.
Max	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	
OTHER ELEMENTS: 0.05 MAX EACH / 0.15 MAX TOTAL									

We hereby certify that the material has been manufactured in accordance with the requirements of the applicable specifications and descriptions set forth on Precision Tube's sales acknowledgement. During the manufacturing, testing and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employing a single boundary containment. Test results indicate that the material is compliant with the current revision of the RoHS Directive (2011/65/EU).

TEST REPORTS

ACCEPTED BY

DEC 19 2017

49380591
TW METALS

By:

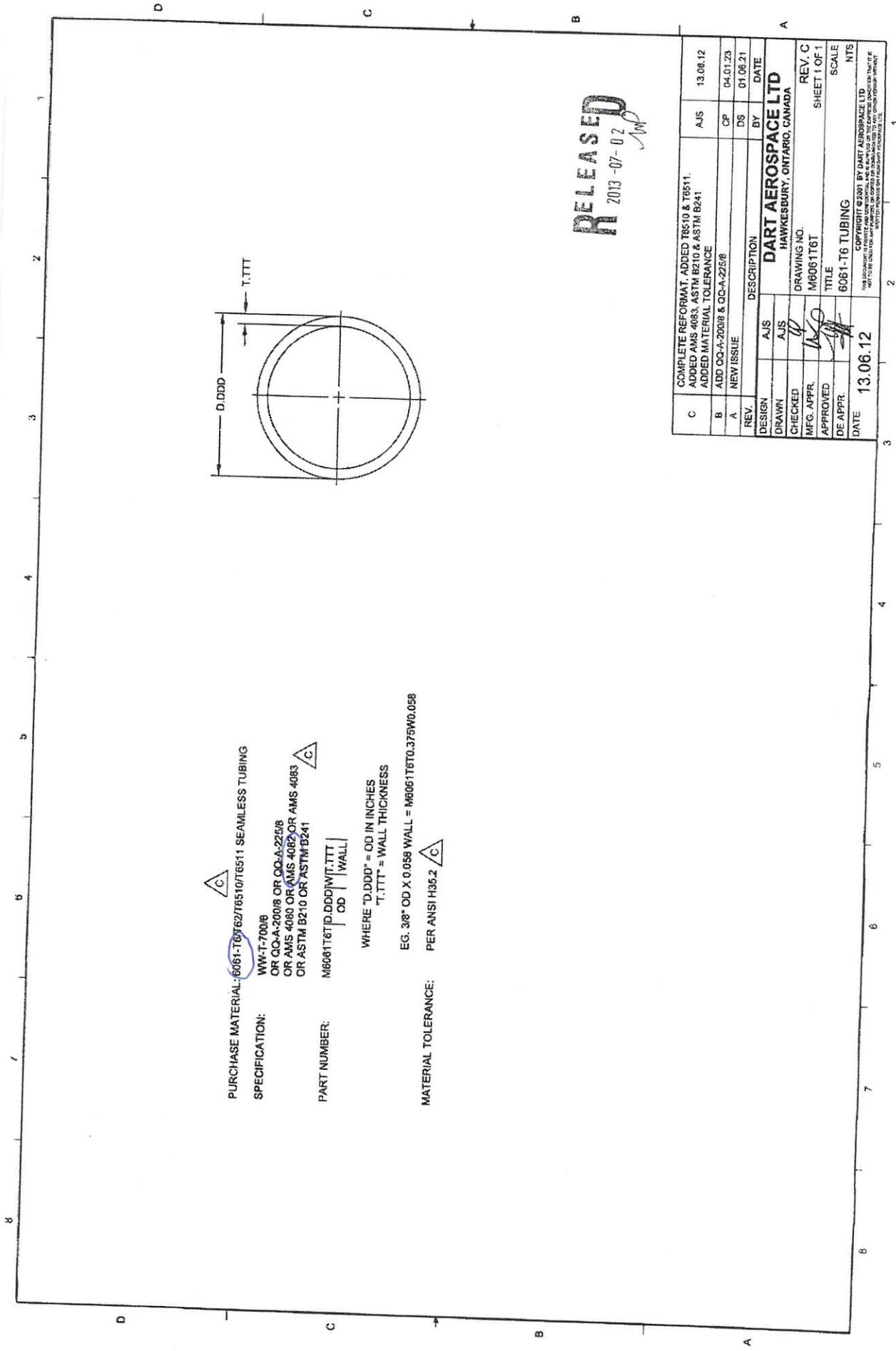
Jennifer James

Jennifer James
Quality & Technical Lead

12/13/17

Page: 1 of 1

Melted and Manufactured in USA
QMS Registered to ISO 9001: 2008



MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T67D.3125 W.058
 DATE: 18/11/12

PO / BATCH NO.: P0041405/3126576

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 108ft
 QUANTITY INSPECTED: 108ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.3125"
 THICKNESS RECEIVED: 0.3125"
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	N	
CORRECT FINISH	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER M-DRAWING	Y	N	AMS 4082
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT REF # TO LINK CERT	Y	N	
CORRECT MATERIAL IDENTIFICATION	Y	N	HT-2927553
CORRECT M# ON THE MATERIAL	Y	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/12</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

KAISER

ALUMINUM

FABRICATED PRODUCTS

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CUSTOMER PO NUMBER:		CUSTOMER PART NUMBER:		PRODUCT DESCRIPTION:			
M49383418-1		42588		Drawn Seamless Tube/Pipe			
KAISER ORDER NUMBER:	LINE ITEM:		SHIP DATE:	KAISER LOT NUMBER:	ALLOY:	TEMPER:	
225211	001		03/03/2018	F00262536	6061	T6	
WEIGHT SHIPPED:	QUANTITY:		B/L NUMBER:	DIAM/DAFT/THKNS:	WIDTH:	LENGTH:	
638.000 LB	230.000 PCS		228717			12.000 FT	
SHIP TO:	SOLD TO:						
TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA	TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA						

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00262536	0001	0001	48.0	43.2	19.0	N/A	N/A	N/A
F00262536	0001	0002	48.0	43.2	19.0	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D30862	.58	.24	.22	.03	.92	.07	.07	.02	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 0.6250"; Wall: 0.1250"; Round @
 AMS4082P AMS-WW-T-700/6C ASTM B210-12 WW-T-700/6F
 WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS4082P, WAS NOT OILED.
 This Product Complies to FAR BAA, DFARS BAA, FAR TAA
 COMPLIES TO DIN EN 10204 JAN 2005
 No Weld Repair. Mercury Free.



Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
 MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
 (DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
 TRADE AGREEMENTS).

Plant Serial: 00027581
 Kaiser Order Number: 225211
 Line Item: 001

KAISER

ALUMINUM

FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

BEST IN CLASS

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

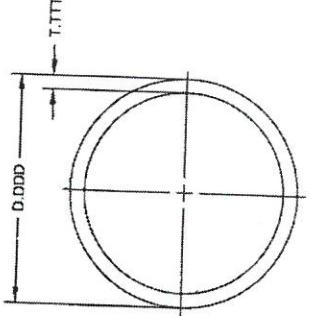
Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentidt, Quality Manager

Hans Kattentidt



Plant Serial: 00027581
Kaiser Order Number: 225211
Line Item: 001

PURCHASE MATERIAL: M6061-T6 / T62/T6510/T6511 SEAMLESS TUBING	
SPECIFICATION: WV-T-7006 OR QQ-A-200/8 OR AMS 4083 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASME B21.0 OR ASME B24.1	
PART NUMBER:	M6061T16 / D.OD / T. TT / OD / WALL
WHERE "D.OD" = OD IN INCHES "T. TT" = WALL THICKNESS	
EG. 3/8" OD X 0.058 WALL = M6061T6T0.375W0.058	
MATERIAL TOLERANCE: PER ANSI H35.2	
	

RELEASED *[Signature]*
2013-07-02

DESIGN	AJS	AJS	DART AEROSPACE LTD
DRAWN			HAWKESBURY, ONTARIO, CANADA
CHECKED			REV. C
MFGR. APPR.		M6061T6T	SHEET 1 OF 1
APPROVED			SCALE
DEF APPR.			NTS
DATE	13.06.12	COPRIGHT © 2001 BY DART AEROSPACE LTD THE INFORMATION CONTAINED HEREIN IS UNPUBLISHED PROPRIETARY INFORMATION. IT IS PROVIDED ON A CONFIDENTIAL BASIS AND MAY NOT BE COPIED OR DISCLOSED EXCEPT AS AUTHORIZED IN WRITING BY DART AEROSPACE LTD.	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6T0.625W.125
 DATE: 18/11/12

PO / BATCH NO.: P0041405/S126577

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 12 ft
 QUANTITY INSPECTED: 12 ft
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625"
 THICKNESS RECEIVED: 0.625"
 SHEET SIZE ORDERED: -
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
	Y	N	
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>AMS 4082</i>
CORRECT THICKNESS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>HT: F00262536</i>
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	WEBSTER

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AJ</u>	SIGNED OFF BY: _____
DATE: <u>18/11/12</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in